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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,308

09/27/2006

Yasuyuki Arai

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EXAMINER

WANG, JACK K

ART UNIT

PAPER NUMBER

2612

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,308	<b>Applicant(s)</b> ARAI ET AL.	
	<b>Examiner</b> JACK WANG	<b>Art Unit</b> 2612	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/3/2011 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 20-21, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Twitchell, JR. (Pub # US 2004/0082296 A1), and further in view of Yagi et al. (US Patent # 6,774,470 B2).

Consider claim 1, Twitchell, JR. teaches a product management system comprising: a first resonance circuit (LPRF) (110, Fig. 1); a second resonance circuit (MLG) (180, Fig. 1); and a reader/writer (NIM) (140, Fig. 1) for at least one of reading information stored in a semiconductor device ((RFT) (130, Fig. 1) and writing information in the semiconductor device (RFT) (130, Fig. 1), wherein a first packing material (120, Fig. 1) for packing a product (134, Fig. 1) is provided with the first resonance circuit (LPRF) (110, Fig. 1), wherein a second

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packing material (184, Fig. 1) for packing the first packing material (120, Fig. 1) is provided with the second resonance circuit (MLG) (180, Fig. 1), wherein the product (134, Fig. 1) is provided with the semiconductor device (RFT) (130, Fig. 1), wherein the second resonance circuit (MLG) (180, Fig. 1) can communicate with the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (110, Fig. 1), and wherein the first resonance circuit (LPRF) (110, Fig. 1) can communicate with the second resonance circuit (MLG) (180, Fig. 1) and the semiconductor device (RFT) (130, Fig. 1).

Twitchell, JR. does not teach wherein the first resonance circuit comprises a first antenna coil and a first capacitor, wherein the second resonance circuit comprises a second antenna coil and a second capacitor.

In the same field of endeavor, Yagi et al. teaches the resonance circuits (1, Fig. 3) comprises an antenna coil (3, Fig. 3) and a capacitor (2, Fig. 3) [0032] for the benefit of providing non-contact communication signal boosting circuit details.

Although Yagi et al. does not specifically teach the first and second resonance circuit. However, since the first resonance circuit and second resonance circuit are performing same function and contained same structure. Therefore, these resonance circuits are identical redundant circuits, which considered as design choice for the particular application and do not render a patentable weight.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first resonance circuit comprises a first antenna coil and a first capacitor, wherein the second resonance circuit comprises a second antenna coil and a

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second capacitor as shown in Yagi et al., in Twitchell, JR. device for the benefit of providing non-contact communication signal boosting circuit details.

Consider claim 2, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (MLG) (180, Fig. 1), a communication method between the first resonance circuit (MLG) (180, Fig. 1) and the second resonance circuit (LPRF) (110, Fig. 1), and a communication method between the second resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (130, Fig. 1) are identical to each other [0010].

Consider claim 3, Twitchell, JR. teaches the product management system, except wherein the communication method is an electromagnetic induction method.

In the same field of endeavor, Yagi et al. teaches the communication method is an electromagnetic induction method (radio waves) [0031] for the benefit of providing non-contact communication between the RFID tags.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the communication method is an electromagnetic induction method as shown in Yagi et al., in Twitchell, JR. device for the benefit of providing non-contact communication between the RFID tags.

Consider claim 4, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) operate in accordance with Bluetooth standard [0031] is different from a communication method between the first resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (RTF) (130, Fig. 1) using inductive energy [0028].

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Consider claim 5, Twitchell JR. clearly shows and discloses the product management system, wherein the communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is any one of an electromagnetic induction method and a microwave method (Bluetooth) [0031].

Consider claim 6, Twitchell, JR. teaches a product management system comprising: a first resonance circuit (LPRF) (110, Fig. 1); a second resonance circuit (MLG) (180, Fig. 1); and a reader/writer (NIM) (140, Fig. 1) for at least one of reading information stored in a semiconductor device (RFT) (130, Fig. 1) and writing information in the semiconductor device (RFT) (130, Fig. 1), wherein a first packing material (120, Fig. 1) for packing a product (134, Fig. 1) is provided with the first resonance circuit (LPRF) (110, Fig. 1), wherein a second packing material (184, Fig. 1) for packing the first packing material (120, Fig. 1) is provided with the second resonance circuit (MLG) (180, Fig. 1), wherein the product (134, Fig. 1) is provided with the semiconductor device (RFT) (130, Fig. 1), wherein the second resonance circuit (MLG) (180, Fig. 1) can communicate with the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (LPRF) (110, Fig. 1), wherein the first resonance circuit (LPRF) (110, Fig. 1) can communicate with the second resonance circuit (MLG) (180, Fig. 1) and the semiconductor device (RFT) (130, fig. 1); and wherein a communication range between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is longer than a communication range between the first resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (RFT) (130, Fig. 1).

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In the same field of endeavor, Yagi et al. teaches the resonance circuits (1, Fig. 3) comprises an antenna coil (3, Fig. 3) and a capacitor (2, Fig. 3) [0032] for the benefit of providing non-contact communication signal boosting circuit details.

Although Yagi et al. does not specifically teach the first and second resonance circuit. However, since the first resonance circuit and second resonance circuit are performing same function and contained same structure. Therefore, these resonance circuits are identical redundant circuits, which considered as design choice for the particular application and do not render a patentable weight.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first resonance circuit comprises a first antenna coil and a first capacitor, wherein the second resonance circuit comprises a second antenna coil and a second capacitor as shown in Yagi et al., in Twitchell, JR. device for the benefit of providing non-contact communication signal boosting circuit details.

Consider claim 7, Twitchell, JR. clearly shows and discloses the product management system, wherein the communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is any one of an electromagnetic induction method and a microwave method (Bluetooth) [0031].

Consider claim 8, Twitchell, JR. clearly shows and discloses the product management system, wherein the semiconductor device (RFT) (130, Fig. 1) is selected from the group of an ID tag, an ID chip, an ID label, an ID seal and an ID sticker [0030].

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Consider claims 20 and 21, Twitchell, JR. clearly shows and discloses the product management system, wherein the second packing material (184, Fig. 1) is a transport vehicle [0057 lines 7-12].

Consider claims 23 and 24, Twitchell JR. teaches the product management system.

Twitchell JR. does not teach wherein the first resonance circuit consists of the first antenna coil and the first capacitor, and wherein the second resonance circuit consists of the second antenna coil and the second capacitor.

In the same field of endeavor, Yagi et al. teaches the resonance circuits (1, Fig. 3) consists an antenna coil (3, Fig. 3) and a capacitor (2, Fig. 3) [0032] for the benefit of providing non-contact communication signal boosting circuit details.

Although Yagi et al. does not specifically teach the first and second resonance circuit. However, since the first resonance circuit and second resonance circuit are performing same function and contained same structure. Therefore, these resonance circuits are identical redundant circuits, which considered as design choice for the particular application and do not render a patentable weight.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first resonance circuit consists a first antenna coil and a first capacitor, wherein the second resonance circuit consists a second antenna coil and a second capacitor as shown in Yagi et al., in Twitchell, JR. device for the benefit of providing non-contact communication signal boosting circuit details.



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4. Claims 9, 11, 13-19, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Twitchell, JR. (Pub # US 2004/0082296 A1), and further in view of Yagi et al. (Pub # US 2003/0122233 A1) and Arai et al. (Pub # US 2004/0164302 A1).

Consider claim 9, Twitchell, JR. teaches a method comprising: sending at least one of a first signal comprising first information and a first electric power from a reader/writer (NIM) (140, Fig. 1) to a resonance circuit (MLG or LPRF) (180 or 110, Fig. 1); sending at least one of a second signal comprising the first information and a second electric power from the resonance circuit (MLG or LPRF) (180 or 110, Fig. 1) to a semiconductor device (RFT) (130, Fig. 1) in response to a receipt of said at least one of the first signal and the first electric power; sending a third signal comprising second information from said semiconductor device (RFT) (130, Fig. 1) to the resonance circuit (MLG or LPRF) (180 or 110, Fig. 1) in response to a receipt of said at least one of the second signal and the second electric power by the semiconductor device, sending a fourth signal comprising said second information from the resonance circuit (MLG or LPRF) (180 or 1110, Fig. 1) to the reader/writer (NIM) (140, Fig. 1), wherein the semiconductor device (RFT) (130, Fig. 1) is attached to a product (134, Fig. 1), the product (134, Fig. 1) is contained in a packing material (120, Fig. 1), the resonance circuit (MLG or LPRF) (180 or 110, Fig. 1) is attached to the packing material (120 or 184, Fig. 1) and the reader/writer (NIM) (140, Fig. 1) is disposed outside of the packing material (120 or 184, Fig. 1).

Twitchell, JR. does not teach wherein the resonance circuit comprises an antenna coil and a capacitor, wherein said semiconductor device comprises a thin film transistor, and an antenna.

In the same field of endeavor, Yagi et al. teaches the resonance circuit (1, Fig. 3) comprises an antenna coil (3, Fig. 3) and a capacitor (2, Fig. 3) for the benefit of providing non-contact communication signal booster circuit details.

Furthermore, in the same field of endeavor, Arai et al. teaches the semiconductor device (RFID tag) comprises a thin film transistor [0076], and an antenna [0074] for the benefit of providing detail description of integrated circuit device IC label.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the resonance circuit comprises an antenna coil and a capacitor as shown in Yagi et al., and the semiconductor device comprises a thin film transistor, and an antenna as shown in Arai et al., in Twitchell, JR. method for the benefit of providing non-contact communication signal boosting circuit details, and providing detail description of integrated circuit device IC label.

Consider claim 11, Twitchell JR. clearly shows and discloses the method, wherein the semiconductor device (RFT) (130, Fig. 1) is selected from the group of an ID tag, an ID chip, an ID label, an ID seal and an ID sticker [0029].

Consider claim 13, Twitchell, JR. teaches a product management system comprising: a semiconductor device (RFT) (130, Fig. 1); a resonance circuit (LPRF) (110, Fig. 1); a packing material (120, Fig. 1); and a reader/writer (NIM) (140, Fig. 1) for at least one of reading information stored in the semiconductor device (RFT) (130, Fig. 1) and writing information in the semiconductor device (RFT) (130, Fig. 1), wherein the packing material (120, Fig. 1) for packing a product (134, Fig. 1) is provided with the resonance circuit (LPRF) (110, Fig. 1), wherein the product (134, Fig. 1) is provided with the semiconductor device (RFT) (130, Fig. 1),

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wherein the resonance circuit (LPRF) (110, Fig. 1) can communicate with the reader/writer (NIM) (140, Fig. 1) and the semiconductor device (RFT) (130, Fig. 1).

Twitchell, JR. does not teach wherein the semiconductor device comprises a thin film transistor, and an antenna, and wherein the resonance circuit comprises an antenna coil and a capacitor.

In the same field of endeavor, Arai et al. teaches the semiconductor device (RFID tag) comprises a thin film transistor [0076], and an antenna [0074] for the benefit of providing detail description of integrated circuit device IC label.

Furthermore, in the same field of endeavor, Yagi et al. teaches the resonance circuit (1, Fig. 3) comprises comprising an antenna coil (3, Fig. 4) and a capacitor (2, Fig. 4) for the benefit of providing non-contact communication signal boosting circuit details.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the semiconductor device comprises a thin film transistor, and an antenna as shown in Arai et al., and the resonance circuit comprises an antenna coil and a capacitor as shown in Yagi et al., in Twitchell, JR. device for the benefit of providing detail description of integrated circuit device IC label, and providing non-contact communication signal boosting details.

Consider claim 14, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the first resonance circuit (MLG) (180, Fig. 1), a communication method between the first resonance circuit (MLG) (180, Fig. 1) and the second resonance circuit (LPRF) (110, Fig. 1), and a

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communication method between the second resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (130, Fig. 1) are identical to each other [0010].

Consider claim 15, Twitchell, JR. teaches the product management system, except wherein the communication method is an electromagnetic induction method.

In the same field of endeavor, Yagi et al. teaches the communication method is an electromagnetic induction method (radio wave) [0031] for the benefit of providing non-contact communication between the RFID tags.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the communication method is an electromagnetic induction method as shown in Yagi et al., in Twitchell, JR. and Arai et al. combined device for the benefit of providing non-contact communication between the RFID tags.

Consider claim 16, Twitchell, JR. clearly shows and discloses the product management system, wherein a communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) operate in accordance with Bluetooth standard [0031] is different from a communication method between the first resonance circuit (LPRF) (110, Fig. 1) and the semiconductor device (RTF) (130, Fig. 1) using inductive energy [0028].

Consider claim 17, Twitchell, JR. clearly shows and discloses the product management system, wherein the communication method between the reader/writer (NIM) (140, Fig. 1) and the second resonance circuit (MLG) (180, Fig. 1) is any one of an electromagnetic induction method and a microwave method (Bluetooth) [0031].

Consider claim 18, Twitchell, JR. clearly shows and discloses the method, wherein the resonance circuit further comprises any one of a battery, a CPU and a memory [0016].

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Consider claim 19, Twitchell, JR. clearly shows and discloses the product management system, wherein the resonance circuit further comprises any one of a battery, a CPU and a memory [0016].

Consider claims 25, Twitchell JR. teaches the product management system.

Twitchell JR. does not teach wherein the first resonance circuit consists of the first antenna coil and the first capacitor, and wherein the second resonance circuit consists of the second antenna coil and the second capacitor.

In the same field of endeavor, Yagi et al. teaches the resonance circuits (1, Fig. 3) consists an antenna coil (3, Fig. 3) and a capacitor (2, Fig. 3) [0032] for the benefit of providing non-contact communication signal boosting circuit details.

Although Yagi et al. does not specifically teach the first and second resonance circuit. However, since the first resonance circuit and second resonance circuit are performing same function and contained same structure. Therefore, these resonance circuits are identical redundant circuits, which considered as design choice for the particular application and do not render a patentable weight.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first resonance circuit consists a first antenna coil and a first capacitor, wherein the second resonance circuit consists a second antenna coil and a second capacitor as shown in Yagi et al., in Twitchell, JR. and Arai et al. combined device for the benefit of providing non-contact communication signal boosting circuit details.

Consider claims 27, Twitchell JR. teaches the product management system.

Twitchell JR. does not teach wherein the resonance circuit consists a the antenna coil and the capacitor.

In the same field of endeavor, Yagi et al. teaches the resonance circuits (1, Fig. 3) consists an antenna coil (3, Fig. 3) and a capacitor (2, Fig. 3) [0032] for the benefit of providing non-contact communication signal boosting circuit details.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the resonance circuit consists an antenna coil and the capacitor as shown in Yagi et al., in Twitchell, JR. and Arai et al. combined device for the benefit of providing non-contact communication signal boosting circuit details.

5. Claims 10-12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Twitchell, JR. (Pub # US 2004/0082296 A1), and further in view of Arai et al. (Pub # US 2004/0164302 A1).

Consider claim 10, Twitchell, JR. teaches a method comprising: sending at least one of a first signal comprising first information and a first electric power from a reader/writer (NIM) (140, Fig. 1) to a first resonance circuit (MLG) (180, Fig. 1), sending at least one of a second signal comprising the first information and a second electric power from the first resonance circuit (MLG) (180, Fig. 1) to a second resonance circuit (LPRF) (110, Fig. 1) in response to a receipt of said at least one of the first signal and the first electric power, sending at least one of a third signal comprising the first information and a third electric power from the second resonance circuit (LPRF) (110, Fig. 1) to a semiconductor device (RFT) (130, Fig. 1) in response to a receipt of said at least one of the second signal and the second electric power; sending a fourth

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signal comprising second information from said semiconductor device (RFT) (130, Fig. 1) to the second resonance circuit (LPRF) (110, Fig. 1) in response to a receipt of said at least one of the third signal and the third electric power by the semiconductor device (RFT) (130, Fig. 1), sending a fifth signal comprising said second information from the second resonance circuit (LPRF) (110, Fig. 1) to the first resonance circuit (MLG) (180, Fig. 1), sending a sixth signal comprising said second information from the first resonance circuit (MLG) ((180, Fig. 1) to the reader/writer (NIM) (140, Fig. 1), wherein the semiconductor device (RFT) (130, Fig. 1) is attached to a product (134, Fig. 1), the product (134, Fig. 1) is contained in a second packing material (120, Fig. 1), the second resonance circuit (LPRF) (110, Fig. 1) is attached to the second packing material (120, Fig. 1), the second packing material (120, Fig. 1) is contained in a first packing material (184, Fig. 1), the first resonance circuit (MLG) (180, Fig. 1) is attached to the first packing material (184, Fig. 1), and the reader/writer (NIM) (140, Fig. 1) is disposed outside of the first packing material.

Twitchell, JR. does not teach wherein said semiconductor device comprises a thin film transistor, and an antenna.

In the same field of endeavor, Arai et al. teaches the semiconductor device (RFID tag) comprises a thin film transistor [0076], and an antenna [0074] for the benefit of providing detail description of integrated circuit device IC label.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the semiconductor device comprises a thin film transistor, and an antenna as shown in Arai et al., in Twitchell, JR. method for the benefit of providing detail description of integrated circuit device IC label.

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Consider claim 11, Twitchell JR. clearly shows and discloses the method, wherein the semiconductor device (RFT) (130, Fig. 1) is selected from the group of an ID tag, an ID chip, an ID label, an ID seal and an ID sticker [0029].

Consider claim 12, Twitchell, JR. clearly shows and discloses the method, wherein the first packing material (184, Fig. 1) is selected from the group of a suitcase, a corrugated fiberboard, a container and a transporting vehicle [0057 lines 7-12].

Consider claim 22, Twitchell, JR. clearly shows and discloses the product management system, wherein the first packing material (184, Fig. 1) is a transport vehicle [0057 lines 7-12].

6. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Twitchell, JR. (Pub # US 2004/0082296 A1) in view of Arai et al. (Pub # US 2004/0164302 A1) as applied to claim 10 above, and further in view of Yagi et al. (Pub # US 2003/0122233 A1).

Consider claim 26, Twitchell JR. and Arai et al. combined reference teaches the product management system.

Twitchell JR. and Arai et al. combined reference does not teach wherein the first resonance circuit consists of the first antenna coil and the first capacitor, and wherein the second resonance circuit consists of the second antenna coil and the second capacitor.

In the same field of endeavor, Yagi et al. teaches the resonance circuits (1, Fig. 3) consists an antenna coil (3, Fig. 3) and a capacitor (2, Fig. 3) [0032] for the benefit of providing non-contact communication signal boosting circuit details.

Although Yagi et al. does not specifically teach the first and second resonance circuit. However, since the first resonance circuit and second resonance circuit are performing same



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function and contained same structure. Therefore, these resonance circuits are identical redundant circuits, which considered as design choice for the particular application and do not render a patentable weight.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the first resonance circuit consists a first antenna coil and a first capacitor, wherein the second resonance circuit consists a second antenna coil and a second capacitor as shown in Yagi et al., in Twitchell, JR. and Arai combined device for the benefit of providing non-contact communication signal boosting circuit details.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACK WANG whose telephone number is (571)272-1938. The examiner can normally be reached on M-F 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Bugg can be reached on 571-272-2998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JACK WANG/  
Examiner, Art Unit 2612